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## ORANGE COUNTY AMATEUR RADIO CLUB

VOL. XXVII No. 4

P. O. Box 1704, ORANGE, CA. 92668

APRIL 1986

Q When is it exactly the same day of the week all over the world? Why is the Greenwich Line ( $0^{\circ}$  longitude) so very important? Why do the British drop a big orange ball each day at 1:00 pm.? These and many more mysteries will be answered when Jim, N6JSV, presents his talk and slides on:

" 0 HOUR UT"

E at Club meeting on Friday, Apr. 18, at 7:30 pm. Jim recently visited the Greenwich Museum in London, England, and his slides will show us relics that are both historically and scientifically significant! This should be another goodie! So get off your 'duffs', turn off the TV, and come have an 'eyeball' with your friends! Come one, come all!...And don't forget to buy raffle tickets from Kei and be the R 1st OP to win a free oil change at IND's.

NORTH POLE

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GREENWICH LINE

DATE LINE

"RF"

ORANGE COUNTY AMATEUR RADIO CLUB

APR 86

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1986 CLUB BOARD OF DIRECTORS

President	Frank Smith	WA6VKZ	492-7215
Vice President	Jim Talcott	N6JSV	838-5395
Secretary	Ken Konechy	W6HHC	541-6249
Treasurer	Jeanie Talcott	KB6EZS	838-5395
Activities Chairman	Kei Yamachika	W6NGO	538-8942
Membership Chairman	Jim Townsend	NS6W	551-5339
Public Relations D.	Mac MacInnes	W6MIL	594-0442
T.V.I. Chairman	Al Watts	W6IBR	531-6245
Member At Large	Joe Partlow	KB6F2U	542-3122
Member At Large	Bob Eckweiler	AF6C	639-5074

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CLUB APPOINTMENTS

Club Historian	Bob Evans	WB6IXN	543-9111
W6ZE Trustee	Bob Eckweiler	AF6C	639-5074
R.F. Editor	Bob Evans	WB6IXN	543-9111
Teen Representative	(open)		

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CLUB FUNCTIONS

MONTHLY MEETING:	3rd Friday of each month, 7:30PM at: MERCURY SAVINGS & LOAN 1095 Irvine Blvd. (4th St becomes Irvine) Tustin, Ca. <u>Talk-in on 146.55 MHz</u>
Mar 18th	
May 16th	
Jun 20th	(Take the 4th St. exit to the 55 FREEWAY and head east. Continue about two blocks past Newport Blvd. on the left.)

CLUB BREAKFAST:	1st Saturday of each month, 8:00AM at: MIMI's CAFE 17231 17th Street Tustin, Ca. (714) 544-5522
Apr 3rd	
Jun 7th	(55 FREEWAY at 17th Street east.)

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CLUB NETS

BAND	MODE	DAY OF WEEK	LOCAL TIME	FREQ MHz
2 Meters	FM	Wednesday	2100 hrs.	146.550
15 Meters	SSB	Wednesday	2000 hrs.	21.375
15 Meters	CW	Sunday	2000 hrs.	21.175

(Listen for W6ZE, net control)

## \*\*\* ON THE NETS \*\*\*

Not much activity on the 21.175 CW net! IXN has been acting net control, and only KB6IND, Kevin, has been reporting in. However, FOR THE GOOD OF THE CLUB, IND has offered to raffle a FREE OIL CHANGE once monthly at every meeting, to be raffled along with Kei's other goodies! So don't forget to pick up raffle tickets from Kei each month at meeting! We also discussed converting KNOTS to mi/hr, and, Kevin will have a novice station at Field Day.

On the 21.375 net, we all have tweaked our fine tuning to pick up even the weakest of QRP sigs from HHC! However, no electromagnetic radiation on this freq. has HHC attached to it this month...Can't say that for PACKET though!! On 3/5, AF6C logged in IXN, and Halley's comet and a RACES article for 'RF' were discussed.

On 3/19, AF6C logged in ULU, after his bout with the flu! IXN forgot to check in!

On 3/26, 21.375 found AF6C logging in NGO, ULU, & IXN. Among items discussed was W6ZE's new Groban 4KW generator purchased for us by Kei, NGO. Costing in the neighborhood of \$574, Kei purchased it through Santa Fe Tool & Supply. NGO has already 'burned it in' and has made the junction boxes for the Club's feeder cables for Field Day. AF6C mentioned (in the background) that the generator has a voltage regulator which makes up for line loss! And now, OMs, we need good, clean gas cans for gasoline for the generator on Field Day (5 gal. or larger, please)! Contact Kei if you can help. FLASH FROM AF6C to other amateur radio clubs: If a copy of 'RF' ends up in your ARC, why not send a copy of your club paper to: Bob Evans, WB6IXN, 701 S. Kilson Dr., Santa Ana, CA. 92701. Upon receipt of your paper, we will add your club name and adr to our growing circulation list and we will reciprocate RFs and your club paper forever!! (To be sung to 'Clementine'):

- |                              |                                   |
|------------------------------|-----------------------------------|
| I. Ruby lips above the water | II. Moving lips above the mike    |
| Blowing bubbles sweet & fine | Making QSOs sweet & fine          |
| But alas, I was no swimmer   | But alas, no one reported         |
| And I lost my Clementine!    | Two meter net was lost this time! |

What daring soul will report 2 meter activity to IXN?! Blowing bubbles sweet & fine is alright for Clementine, but we need reports on those '2m confessions' uttered by 'ruby lips' above the mike!...by the 21.375 net on Wed...the 21.175 CW net on Sun...by the twisted pair...by eyeball at Club meetings...wat sa, gang?!!

## \*\*\* AT LAST MEETING \*\*\*

Dan Peters, NY6U, will be joining the Club and will be placing an add in 'RF'. Software, hardware, firmware, dinnerware...well, everything but dinnerware... was covered by Bill, YKH, Judy, SKE, and Bob, AF6C, in their demonstration and talk on Packet software (programs). And judging by the resounding claps at the end, if you missed last meeting, you missed a goodie!!

275 amateurs participated in the Marathon in LA.

Good to have ULU back after his bout with the flu.

COJ put two montages of 1968 Field Day in the Club History.

AF6C will attempt to download packet info from WB6YMH.

## \*\*\* 'RIFFY' ROBERT &amp; THE TENNESSEE VALLEY INDIANS \*\*\*

All of us, sooner or later, get the usual complaint of radio frequency interference or TV interference from our surrounding neighbors. Thus, from time to time, and as space permits, I will review some of the more popular ways to reduce these 'plagues' of amateur radio!

I. Eliminate harmonic radiation...Clean up your transmitter. Usual methods include low pass filter, a transmatch, and an AC line filter, connected as shown in Fig. 1:

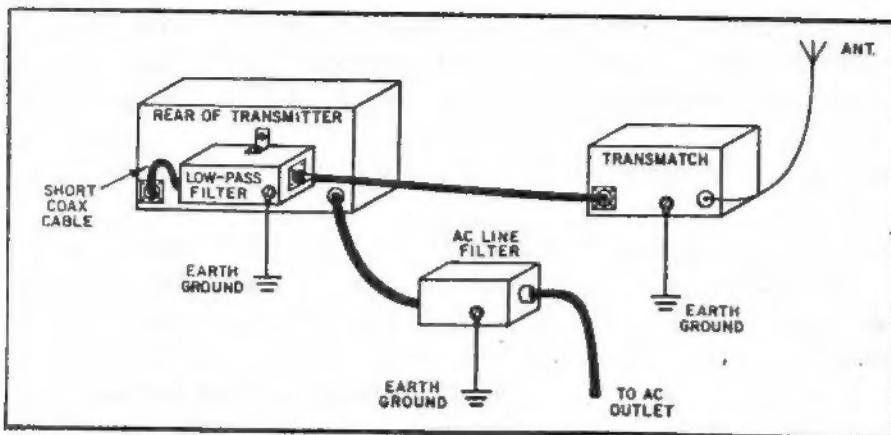


Fig. 1 — Suggested techniques for filtering harmonic energy from the leads of an amateur transmitter.

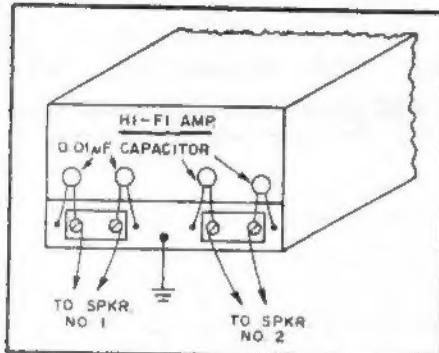


Fig. 18 — Most hi-fi interference can be cured by installing a bypass capacitor from each speaker connection to ground as shown here. Capacitor leads should be kept as short as possible.

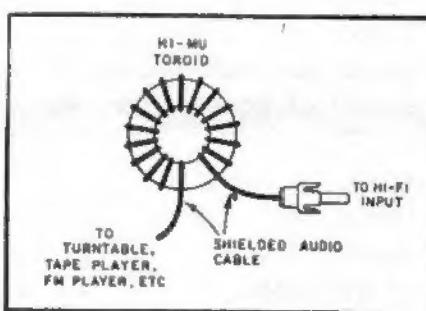


Fig. 20 — The connecting cables between modules of a hi-fi system can be treated with rf chokes by wrapping the shielded audio cable around a high-mu toroid core as shown here.  
( $M_i = 950 \text{ to } 2000$ )

## II. RFI in stereo equipment...

Try the solutions shown in figs. 18 & 20. Both methods will break up RF paths while permitting the desired audio frequencies to reach the speakers & amplifier respectively.

More goodies at a later date...de WB6IXN  
pixs from ARRL "Radio Frequency Interference" booklet...



## \*\*\* SOUTHERN CALIFORNIA SIX METER CLUB QSO PARTY \*\*\*

Purpose: To generate & maintain maximum activity on six meters in any communication mode.

Object: To muster all hams possible to 'mountain top', or provide strong sigs for inter-communication.

Date: May 10 & 11, 1986 (dates may change)

Time: SCORING TIME NOON TO NOON PDT.

SCORING: Based on one point per mode per callsign. Multipliers based on (1) per grid square worked. Ex: WA6BFH works N6FSL on SSB, FM, CW and AM - for this BFH gets 4 points for the 4 modes, and (1) multiplier for working grid square DM03...Come on, OPs, let's get out on those hill tops and stir up the sporadic E layer for some good DX!!

## OCARC NET SURVEY

W6ZE

MARCH 21, 1986

Please fill out this questionare and return it, after break, to the front table. The club is trying to see if the nets can be rearranged for better participation.

## General Info:

Class of license:  SWL;  Novice;  Technician;

Check one:  General;  Advanced;  Extra;

Bands Operated:  160;  80;  40;  30;

Check all you use:  20;  15;  12;  10;

6;  2;  1.25;  0.75;

Others (list) \_\_\_\_\_

Modes Operated:  CW  SSB  FM  Digital  
(specify type)

Others (list) \_\_\_\_\_

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Which OCARC nets have you participated in during the past 12 months?

15 SSB (Wed @ 8PM); How often? \_\_\_\_\_

15 CW (Sunday); How often? \_\_\_\_\_

2 SSB (Wed @ 9PM); How often? \_\_\_\_\_

Would you check into one (or more) of these nets if they were held on a different date and/or time?  Yes;  No; Give preferred nets, days and times: \_\_\_\_\_

Continue on back of sheet if required.

What other mode or type nets would you like to have? \_\_\_\_\_

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Your general comments on the OCARC nets: \_\_\_\_\_

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Continue on another sheet if required.

Name and Call: \_\_\_\_\_

optional

W6ZE net survey, 1986

# License Renewal Information ....tnx "Key Clicks" & QST

1) Attach a photocopy, or the original, of your license to the FCC Form 610 (available from ARRL HQ; SASE, please).

2) Mail to FCC, Gettysburg, PA 17325.

3) Retain copies of everything, if possible, as proof of filing before expiration. If you file before the license expiration date, you may continue to operate beyond the expiration date and until the new license arrives. After expiration, there is a two-year

grace period under which you may still renew and keep your call sign without retesting, but you must wait until the new license arrives to operate. After this two-year grace period expires, you must be re-examined for a new license. Normally, application should be made approximately 90 days before expiration; however, renewal can be applied for at any time

during the term of the license.

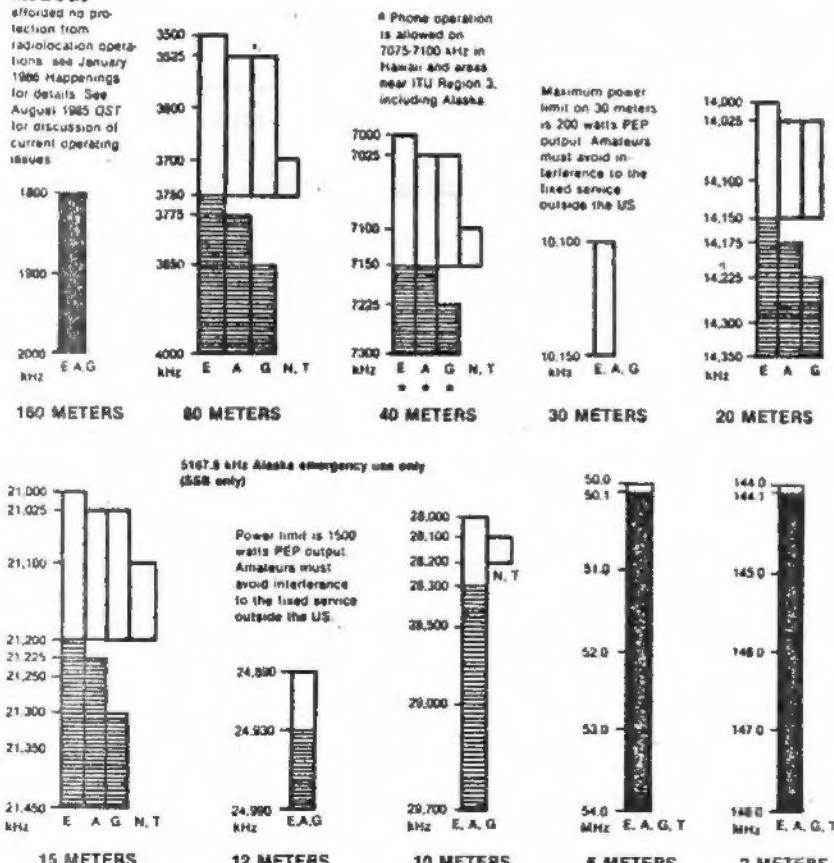
4) If you are simply modifying your license (change of address, for example), you must fill out the Form 610; a letter is no longer sufficient. Incidentally, your license will also be automatically renewed for 10 years at this time.

5) If you have any questions or problems, drop a note to Membership Communications Services, ARRL HQ.

## US Amateur Subband Allocations, 1.8 to 148 MHz

**Power Limits:** All US amateurs are limited to 200 watts PEP output in the Novice segments and in the 30-meter band. On all other segments, 1500 watts PEP output is permitted. In addition, there are ERP limitations for stations in repeater operation. (See 97.67, FCC rules.) At all times the power level should be kept down to that necessary to maintain communications.

Amateur stations operating in 1980 2000 kHz must not cause harmful interference to the radiolocation service and are afforded no protection from radiolocation operations. See January 1980 Happenings for details. See August 1985 QST for discussion of current operating issues.



Operators with Technician class licenses and above may operate on all amateur bands above 50 MHz. For more detailed information see *The FCC Rule Book*.

## The "Considerate Operator's Frequency Guide"

Some frequencies that are generally recognized for certain modes or certain activities (all frequencies are in MHz):

1.800- 1.825	CW only
1.825- 1.830	"DX window" (no W/VEs)
3.590	RTTY DX
3.610- 3.630	RTTY
3.790- 3.800	"DX window"
3.845	SSTV
7.040	RTTY DX
7.080- 7.100	RTTY
7.171	SSTV
10.140-10.150	RTTY
14.080-14.100	RTTY
14.100	NCDXF beacon
14.230	SSTV
14.313	Maritime mobile
21.080-21.100	RTTY
21.340	SSTV
28.080-28.100	RTTY
28.200-28.300	Beacons
28.680	SSTV
29.300-29.500	Satellite downlinks
29.520-29.580	Repeater inputs
29.600	FM simplex
29.620-29.680	Repeater outputs

ARRL band plans for bands above 29.300 MHz are shown in the *ARRL Repeater Directory* and the *FCC Rule Book*. This 24-MHz band plan was adopted by the ARRL Board of Directors in July 1985:

- 24.890-24.920—CW only
- 24.920-24.930—CW and digital
- 24.930-24.990—CW, phone and SSTV

## U.S. Amateur Power Limits

At all times, power level should be kept down to that necessary to maintain communications. All US amateurs are limited to 200-W PEP output in the Novice segments. On all other segments, with certain exceptions in the 10, 902 and 420-MHz bands, 1500-W PEP output is permitted. (full-carrier double-sideband AM radio telephone operations will use old power limits and standards until June 1, 1990.) Present restrictions limit 10-MHz PEP output to 200 W. See December 1984 *QST*, p. 61. (Revised as of November 1985.)

## MINUTES OF O.C.A.R.C. BOARD MEETING OF 4/6/86

- \* All board members were present except Joe/KB6FZY, Mac/W6MIL, and Jeanie/KB6EZS.
- \* A new club roster has been prepared. There are currently 25 paid members.
- \* Kei/W6NGO reported that he had purchased a new 4 KW generator for the club. The cost was \$529 (plus tax). The generator has been tested and seems to perform just fine. Frank/WA6VKZ said he would donate 2 gas cans for us to use at field day.
- \* The treasury reported that the the club currently has \$604.95 in the checking account (including \$307.45 in the "generator fund") and \$662.25 in the savings account. (This report is prior to paying the invoice on the generator).
- \* It was moved that the club "loan" the generator fund the difference in the cost of the new generator...and that the generator fund drive be kept alive to make up the difference plus pay for all generator expenses.
- \* Frank/WA6VKZ reported that he had info on purchasing OCARC caps and/or tee-shirts. Club interest will be sampled at the next meeting. Also, a request is going out to see if anyone in the club has the ability to do silk screening for the club.

submitted by  
KEN/W6HHC  
OCARC Secretary

Msg # 1014, 03/31/86 from Jim K6IYK  
To ALL 'PACKET DIRECTORY'

You are invited to submit your call and other appropriate information for inclusion in a Directory of Southern California Packet Radio Stations. This station will compile the information for initial use by all stations in determining the Home Frequency and Best Path for each station. The information is expected to form the basis for a Directory to be used when the proposed Network of Linked BBS's is implemented. Eventually you will only have to address a message with the station's Call Sign and the Network will determine routing and best delivery point.

To be included in the Directory, please submit the following data in the manner described below.

- 1) Call Sign (with SSID if required)
  - 2) Home City
  - 3) Home Frequency
  - 4) Local Digipeater
  - 5) Home BBS(if Known) <NOTE: May not be defined for many, yet. >
  - 6) Comments on available hours, etc. (Field size will be 22 char max.)
- (cont'd page 9)

ORANGE COUNTY AMATEUR RADIO CLUB  
MINUTES OF O.C.A.R.C. MEETING OF 3/21/86

APR 86

- \* The program for the evening was on "COMPUTER PROGRAMS FOR DIGITAL HAM RADIO" and was presented by Bill Myatt/WA6YKH, Judy/WB6SKE, and Bob/AF6C. The program discussed various software programs that are used to control Packet Radio TNC units from APPLE, RADIO SHACK, and IBM PC computers. The interesting program included demonstrations of two packet stations at the club meeting.
- \* The club treasurer, Jeanie/KB6EZS, reported that the club had \$822 in the checking account and \$653 in the Savings account.
- \* A motion was successful carried to authorize Kei/W6NGO to purchase a 4 KW generator for the clubs use at Field Day for a cost of up to \$530.
- \* The OCARC has a pizza bust planned for the March 22 (5:30 PM) at the Chicago Pizza Factory on 17th Street in Santa Ana.
- \* Judy/WB6SKE reported that HAM RADIO participation in communications for the Los Angeles Marathon went very smoothly and that no major problems occurred.
- \* Alex/W6RE reported that the FCC announced a temporary waiver on 3rd-party traffic thru Packet Radio Repeaters on frequencies above 50 Mhz.
- \* Lloyd/WB6ULU reported that the city of Orange has changed laws to allow antenna heights of 67 feet when operational or if handicapped.
- \* Attendance at the club meeting was 22 people.

submitted by  
KEN/W6HHC  
OCARC Secretary

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The above data should be submitted to K6IYK in one of the following ways:  
1) Via Packet on 145.36 (Via WB5EKU-2)  
2) On Ham Radio BBS (818/998-0319)  
3) By mail - P. O. Box 4357, Chatsworth, CA 91313-4357  
4) Via message on WB6YMH-2 BBS (Least desirable)

Once the Directory begins to form, It will be made available for general distribution.

Thank You, 73

- Jim

Msg # 949, 3/15/86 from Chuck KN6H  
To ALL 'PK 80 GROUP BUY'

QST, QST. To encourage interest in packet radio, the TRW ARC is putting together a group buy of AEA PK 80's. The more the better, since the price will drop accordingly.

Please spread the word far and wide. Please call: (cont'd. page 10)

**Note:**

Pages 9 and 10 are missing from the archived copy and are not included. If anyone can supply the missing page, please contact the club historian.